

BIBLIOGRAPHY.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Professor in Charge of Library.

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

Brak, Dr. C[ornelis].

Atmospheric variations of short and long duration in the Malay Archipelago and neighboring regions, and the possibility to forecast them. Batavia. 1919. 57 p. 27½ cm. (K. Magnetisch en meteorologisch observatorium te Batavia. Verhandelingen 5.)

Engler, Dr. Arnold.

Einfluss des Waldes auf den Stand der Gewässer. Zürich. 1919. 626 p. 127 Tabellen. 25 cm. (Mitteilungen der Schweizerischen Zentralanstalt für das Forstliche Versuchswesen. Band 13.)

Fontseré [y Riba, Eduardo].

Resum de meteorologia. Barcelona. 1919. 32 p. 19 cm. (Minerva . . . primera serie, volum 32.)

Gorczynski, Vladyslaw.

O zmianach okresowych w ciągu doby temperatury i wilgotności powietrza w Warszawie. (La marche diurne de la température et de l'humidité de l'air à Varsovie.) Warsaw. 1916. pp. 577-608. 27 cm. (Extrait des Comptes rendus de la Société des sciences de Varsovie. 1916. IX Année. Fasc. 6.) [Text in Polish; résumé in French.]

Traits caractéristiques du climat de la Pologne parmi les climats Européens. (O niektórych cechach charakterystycznych klimatu ziem polskich na tle klimatów Europy.) Warsaw. 1918. 35 p. 24 cm. (Extrait de la "Revue géographique polonaise.") [Text in French; résumé in Polish.]

Helland-Hansen, Björn, & Nansen, Fridtjof.

Temperature variations in the North Atlantic ocean and in the atmosphere: introductory studies on the cause of climatological variation. Washington. 1920. 408 p. 48 plates. 24 cm. [Translated from Videnskapselskapets Skrifter. I. Mat-Naturv. Klasse. 1916. No. 9, with additions by the authors and by Dr. C. G. Abbott, Smithsonian institution, Washington, U. S. A.] [See also author's abstract, Mo. WEATHER REVIEW, 46: 177-178, 1918.]

Knoche, Dr. Walter.

Über die Zahl der Gewitter in Chile. Valparaiso. [n. d.] [12 p.] 25 cm. (Aus den Mitteilungen des Deutsch-Chilenischen Bundes. Heft 3.)

Marshall, C. F. Dendy.

Variations of atmospheric conditions with altitude. London. 1919. 8 p. 21½ cm. (For official use. Ministry of munitions. Munitions inventions department.)

[Mellish, Henry].

The weather of 1919 at Hodsock priory, Worksop, [Nottinghamshire, England]. [Worksop. 1920. 7 p.] 24 cm.

Mexico. Servicio meteorológico.

Instrucciones para las estaciones termopluviométricas de segunda clase de la red meteorológica Mexicana. Primera edición. Tacubaya. 1920. 22 p. 22 cm.

Sifontes, Ernesto.

Contribución al estudio de la climatología en la zona al sur del Río Orinoco. (Región de Ciudad Bolívar. Venezuela. Guayana.) Ciudad Bolívar. 1918. 23 p. 30½ cm.

Tondorf, F. A.

Registration of earthquakes at the Georgetown University station, and press dispatches received at the Georgetown station from Jan. 1, 1919, to Jan. 1, 1920. Washington. 1920. 25 p. 25 cm. (Georgetown University publication. Bulletin of the Seismographic station, No. 4.) [Also published in MONTHLY WEATHER REVIEW, from month to month.]

Vegard, L., & Krogness, O.

Position in space of the Aurora polaris, from observations made at the Haldde-Observatory 1913-14. Kristiania. 1920. 172 p. 30 cm. (Geofysiske Publikationer, vol. 1, no. 1.)

Wolcott, Robert H.

Seasonal changes in Nebraska and some of their effects on animal life. Lincoln. [1919.] 122 p. 22 cm. (Studies from the Zoological laboratory of the University of Nebraska. 107.) [Reprinted from the Publ. of Nebr. acad. of sciences, vol. 10, No. 1. Dec. 1918.]

Wunderlich, Dr. E.

Handbuch von Polen. (Kongress-Polen). Beiträge zu einer allgemeinen Landeskunde. Berlin. 1918. 512 p. 28 cm. ["Klima," by J. Kölzer, p. 153-192.]

[Young, Floyd D.]

Frost and the prevention of damage by it. Washington. 1920. 48 p. 23 cm. (U. S. Dept. of Agr. Farmers' bulletin 1096.)

RECENT PAPERS BEARING ON METEOROLOGY AND SEISMOLOGY.

C. F. TALMAN, Professor in Charge of Library.

The following titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and cognate branches of science. This is not a complete index of all the journals from which it has been compiled. It shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau.

Aerial age. New York. v. 11. May 31, 1920.

Hersey, Mayo D. Aeronautic instruments. General principles of construction, testing and use. pp. 403-405. [Includes some instruments of meteorological interest.]

Aeronautical journal. London. v. 24. May, 1920.

Jones, Melville. Flying over clouds in relation to commercial aeronautics. p. 220-249. [Ability to fly above clouds is a practical necessity.]

American society of heating and ventilating engineers. Journal. New York. v. 26. May, 1920.

Caldwell, F. W., & Fales, E. N. High efficiency air flow. p. 403-414. [Describes a new method of visualizing air-flow.]

Hall, E. Vernon, & Aeberly, J. J. The relation of the death rate to the wet-bulb temperature. A review of Dr. Huntington's interpretation of the death rate by climographs. p. 471-479.

Armspach, O. W. The relation of wet-bulb temperature to health. p. 480-488. [Health depends in nonheating season on outdoor wet-bulb temperatures and during heating season upon the outdoor dew-point temperature.]

California citograph. Los Angeles. v. 5. March, 1920.

Young, Floyd D. Rate of increase in temperature with altitude during frosty nights in southern California. p. 136.

Young, Floyd D. Effect of topography on temperature distribution in southern California. p. 215, 231.

Engineering news-record. New York. v. 84. May 13, 1920.

Earl, George G. Analysis of New Orleans' rainfall statistics for twenty-five years. p. 363.

Highest Miami flood since 1913 tests conservacy works. p. 944-945.

Franklin institute. Journal. Philadelphia. v. 189. May, 1920.

Webster, David L. The physics of flight. p. 553-580. Urges that aviators should understand the fundamentals of the physics of flight.]

Illustrated London news. London. v. 88. March 13, 1920.

Statistics of Jupiter Pluvius: 1919 "the driest year since 1908." [Map with caption.] p. 401.

The Holy city under snow: Jerusalem isolated by a blizzard for three days and three nights. [Pictures with captions.] p. 404-405.

London, Edinburgh and Dublin philosophical magazine. London. v. 59. 1920.

Wood, R. W. Light scattering by air and the blue color of the sky. p. 423-433. (April.) [Abstract, p. 220, above.]

Thomas, J. S. G. The hot-wire anemometer: its application to the investigation of the velocity of gases in pipes. p. 505-534. (May.)

National academy of sciences. Proceedings. Washington. v. 6. January, 1920.

Abbot, C[harles] G[reeley]. A new method of determining the solar constant of radiation. p. 4-7. [See MONTHLY WEATHER REVIEW, 1919. 47: 580-582.]

Nature. London. v. 105. April 22, 1920.

Chisholm, Geo[rge] G. Dr. J. G. Bartholomew. p. 238-239. [Obituary.]

Physical society of London. Proceedings. London. v. 92. April 15, 1920.

Schuster, Arthur. The influence of small changes of temperature on atmospheric refraction. p. 135-140. [The effect of the passage of the moon's shadow during a solar eclipse.]

Thomas, J. S. G. A directional hot-wire anemometer of high sensitivity, especially applicable to the investigation of low rates of flow of gases. p. 196-207.

Physico-mathematical society of Japan. Proceedings. Tókyó. v. 2. April, 1920.

Aichi, Keiichi. On the distribution of the wind velocity, when the abnormal propagation of sound occurs. Appendix: On the velocity of the sound propagation in the windy atmosphere. p. 63-69.

Popular astronomy. Northfield, Minn. v. 28. May, 1920.

The auroral displays of March 22 and 24, 1920. p. 307-312. [See next issue of the REVIEW.]

Royal meteorological society. Quarterly journal. London. April, 1920.

Bjerknes, Vilhelm. The structure of the atmosphere when rain is falling. p. 119-140. [See abstract in next issue of the REVIEW.]

Shaw, Napier. Pioneers in the science of weather. p. 141-153. [Brief biographies.]

Cave, C. J. P. The status of a meteorological office and its relation to the state and the public. p. 155-162. [Opposing control by the Air Ministry.]

Dines, W[illiam] H[enry]. Atmospheric and terrestrial radiation. p. 163-173.

Brunt, D. Internal friction in the atmosphere. p. 175-185.

Symons memorial medal, 1920. p. 197-199. [To H. H. Hildebrandsson.]

Brooks, C. E. Pelham. The distribution of temperature over Nigeria. p. 204-214.

[See abstract in next issue of the REVIEW.]

Science. New York. v. 51. 1920.

Alexander, Jerome. Structural blue in snow. p. 465-466. (May 7.)

Stebbins, Joel. The aurora of March 22, 1920. p. 485-486. (May 14.)

Roe, E. D., jr. The recent auroras and sun spots. p. 486. (May 14.)

Scientific American monthly. New York. v. 1. May, 1920.

Whitney, Rich D. Will o' the wisp—ignis fatuus—Irrlichter—feux follet. Interesting records of this interesting phenomenon. p. 390-391.

Rice, George S., & Isley, L. C. Electric sparking in mine from lighting. p. 445.

Seismological society of America. Bulletin. Stanford university. v. 10. March, 1920.

Palmer, Andrew H. California earthquakes during 1919. p. 1-8.

Reid, Harry Fielding, & Taber, Stephen. The Virgin Islands earthquakes of 1867-1868. p. 9-30.

Aguilera, Jose G. The Sonora earthquake of 1887. p. 31-44.

Terrestrial magnetism and atmospheric electricity. Baltimore. v. 25. March, 1920.

Angenheister, G. Sonnenaktivität, Sonnenstrahlung, Lufttemperatur und erdmagnetische Aktivität im Verlauf einer Sonnenrotation. p. 17-32.

Washington academy of sciences. Journal. Washington. v. 10. April 10, 1920.

Abbot, C[harles] G[reeley]. The use of solar radiation measurements for weather forecasting in Argentina. p. 226-235. [Discussions by C. F. Marvin, p. 236-240; W. J. Humphreys, p. 240; C. F. Brooks, p. 241; L. A. Bauer, p. 241; C. G. Abbot, p. 241-242.] [See also this REVIEW, Mar., 1920, p. 149-150.]

Aérophile. Paris. 28 année. 1-15 mars 1920.

Lapresle, A. Les propriétés caractéristiques de l'air aux hautes altitudes, d'après les travaux de l'observatoire aéronautique de Lindenberg. p. 66-71.

Rateau, A. Variations du poids spécifique de l'air avec l'atmosphère standard. p. 72-73. [See criticism in later REVIEW.]

Astronomie. Paris. 34 année. Avril 1920.

Quennec, F. L'aurore boréale du 22-23 mars et l'activité solaire. p. 158-160.

Störmer, Carl. Situation dans l'espace de quelques aurores boréales. Observations faites à Bygdo, près de Christiania, pendant l'automne 1919. p. 160-163.

Ciel et terre. Bruxelles. 26 année. Avril 1920.

Lagrange, E. La zone du silence. p. 109-111. [Physical effect due to reflection of sound in upper air.]

Honorat, Marius. Le spectre du Brocken observé au Puys de Manse (Hautes-Alpes.) p. 95-98.

Nature. Paris. 48 année. 1920.

Rolet, A. Les fumigènes pour la protection des récoltes contre les gelées printanières. p. 93-94. (17 avril.)

Influence de la neige sur le développement de la végétation du printemps. p. 179-180. (17 avril.) [Discussed p. 222, above.]

Guillaume, Ch[arles] Ed. Les causes du rayon vert. p. 191-192. (24 avril.)

Revue du ciel. Bourges. 5 année. 1920.

Moreux, Th[éophile]. Les sondages aériens et la prévision du temps. p. 792-794.(mars.) [Conclusion.]

GUILBERT, Gabriel. Un phénomène hivernal. p. 797. (mars.) [Snow remains on porous bodies which are cold from evaporation, but melts on nonporous bodies.]

Moreux, Th[éophile]. A propos de la lune rousse. p. 828-830. (mai.)

Akademie der Wissenschaften. Sitzungsberichte. Wien. Abteilung IIa. 128. Band, 1919.

Hann, Julius v. Die ganztägige (24 stündige) Luftdruckschwankung in ihre Abhängigkeit von der Unterlage (Ozean, Boden-gestalt). p. 379-506. 3. Heft.)

Conrad, V[ictor]. Der tägliche Gang der Temperatur in Belgrad. p. 677-708. (4. Heft.)

Wagner, Artur. Beitrag zu den Temperaturverhältnissen auf Spitzbergen nach fünfjährigen Registrierungen in Greenharbour. p. 709-758. (4. Heft.)

Annalen der Physik. Leipzig. Band 61. 1920.

Dember, H., & Uibe, M. Über die Gestalt des sichtbaren Himmelsgewölbes. p. 313-333. (Heft 4.)

Dember, H., & Uibe, M. Versuch einer physikalischen Lösung des Problems der sichtbaren Größenänderung von Sonne und Mond in verschiedenen Höhen über dem Horizont. p. 353-378. (Heft 4.)

Preussisches meteorologisches Institut. Abhandlungen. Berlin. Band 5. Nr. 6. 1919.

String, R[einhard]. Der tägliche Temperaturlang in geringen Bodentiefen. p. 1-39.

Preussisches meteorologisches Institut. Bericht über die Tätigkeit. Berlin. 1917, 1918, 1919.

Hellmann, G[ustav]. Genauigkeit der Windbeobachtungen in Grossstädten. p. 24-29. [Too much reliance should not be placed in urban wind observations.]

Wussow, G. Die Windverteilung zwischen Rigaischen Meerbussen und westlichen Schwarzen Meer. p. 29-35. [Contains diagram with wind arrows of varying length showing resultant winds for each of 9 places, by months.]

Arendt, Th[eodor]. Über die Treue der Ferngewitter. p. 35-42. [Includes two detailed maps of Germany showing total thunderstorms, and those with precipitation in 1918.]

Arendt, Th[eodor]. Häufigkeit der Böengewitter. p. 42-53.

Budig, W[alter]. Messungen der Sonnenstrahlung auf dem Brocken. p. 53-61.

Marten, W. Weitere Vergleichungen zwischen den absoluten pyrheliometrischen Skalen "Smithsonian revised pyrheliometry of 1913" and Ångström. p. 61-63.

Kähler, K[arl]. Ergebnisse 15 jähriger Potentialgefälle-Regis-trierungen in Potsdam. p. 63-66.

Enoch, K[arl]. "Moazagotls" Wetterwolke über dem Hirschberger Tale in Riesengebirge und ihre prognostische Bedeutung. p. 66-74. [Cap-cloud.]

Kühl, W[ilhelm]. Erfahrungen und Versuche mit den Photo-zellen des Potsdamer Observatoriums. p. 101-111.

Brückmann, W[alter]. Über Versuche der Registrierung der Oberflächentemperatur des Bodens mit elektrischen Thermometern. p. 111-116.

Brückmann, W[alter]. Über die Trägheit meteorologischer Instru-mente. p. 116-122.

Schwalbe, G[ustav], & Budig, W[alter]. Die ungewöhnliche Witterung des November 1919. p. 122-128. [Cold and snowy.]

Kassner, C[arl]. Über einen bemerkungswerten Wetterumschlag im September in Norddeutschland. p. 128-132.

Elsner, G[eorg]. Die Temperaturabnahme mit der Höhe in den deutschen Gebirgen. p. 132-140.

Hellmann, G[ustav]. Die "Thüringische Sundflut" vom Jahre 1613. 2. Nachtrag. p. 141-142.